Application Serial No.: 10/088,744 Attorney Docket No.: 01975-0034

## **AMENDMENTS TO THE SPECIFICATION:**

Please amend the specification as follows:

Please replace the first full paragraph on page 15 with the following paragraph:

Among the species studied the 5 amino acids at the C-terminus of the peptide were found to be almost totally conserved, suggesting that this region is of major importance. Thus, mammalian neuromedins share a common C-terminal sequence "-Phe-Leu-Phe-Arg-Pro-Arg-Asn-amide" [SEQ ID NO: 35] which appears to be essential for its biological activities. NMU is distributed both in the gastrointestinal tract and the central nervous System (CNS). In the rat, the highest concentration of neuromedin (NMU) was found in the ileum, followed by the pituitary, hypothalamus, spinal cord, thyroid, and the genitourinary tract. Immunohistochemistry studies showed that NMU immunoreactivity in the gut was only found in nerve fibers, mainly in the myenteric and submucous plexuses, and in the mucosa of all areas except stomach while no NMU immunoreactivity was found in endocrine cells. In the rat brain, NMU immunoreactivity was found in fibers widespread throughout the brain with the exception of the cerebellum. Human and rat genes encoding NMU precursor have been isolated. Both encode NMU at the C-terminus and other potential peptide products in the middle (Lo et al., 1992, J. Mol. Endocrinol. 6:1538-1544; Austin et al., 1995, J. Mol. Endocrinol. 14:157-169). High affinity NMU binding was characterized in rat uterus, and was shown. to be sensitive to GTP- -S (Nandha et al., 1993, Endocrinology 133:482-486). suggesting that a receptor for NMU should be a G-protein coupled receptor. Nevertheless, the physiological role of NMU remains largely unknown. Neuromedin U

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(NMU) can cause potent contraction of smooth muscle, increase arterial blood pressure,

modify intestinal ion transport, and at low doses stimulates the function and growth of

the adrenal cortex. NMU was also shown to reduce the blood flow in superior enteric

artery and portal vein while increase blood flow slightly in pancreatic tissue.

Please replace the heading at the top of page 52, line 1, with the following

heading:

BRIEF DESCRIPTION OF THE DRAWINGS

Please replace the Sequence Listing at the end of the specification with the

Sequence Listing submitted herewith as an attachment.

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